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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/806,120 | 03/23/2004 | Tetsuo Yamada | 107317-00063 | 2119 |

7590 06/08/2009
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| EXAMINER |
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MISLEH, JUSTIN P

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| ART UNIT | PAPER NUMBER |
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2622

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| MAIL DATE | DELIVERY MODE |
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06/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,120

Applicant(s)

YAMADA, TETSUO

Examiner

JUSTIN P. MISLEH

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2009.
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 & 16-20 is/are pending in the application.
4a) Of the above claim(s) 2-5 and 7-14 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☒ Claim(s) 1, 6, and 16-20 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 3, 2009 has been entered.

Response to Arguments

2. Applicant's arguments in view of the further limiting amendments to independent Claim 1 have been fully considered and are persuasive. The rejection of Claims 1, 6 and 16 – 20 under 35 U.S.C. 102(e) in view of Mutoh et al. has been withdrawn.

Claim Objections

3. **Claims 1, 6, and 16 – 20** are objected to because of the following informalities: lack of clarity and precision.

The Examiner believes the claims, overall, lack the clarity and precision that is expected from proper idiomatic English. While the claims lack clarity and precision, the claims can be interpreted without issue under the requirements of 35 U.S.C. 112, 2nd paragraph. In other words, the Examiner is able to determine the metes and bounds of the claim language.

As an example of the issues described above, “a plurality of columns of photoelectric conversion elements, each column of photoelectric conversion elements containing a plurality of photoelectric conversion elements” should be recited in Claim 1 instead of just “a plurality of photoelectric conversion elements.” As another example, “each column of the plurality of columns of vertical charge transfer devices” should be recited in Claim 1 instead of “each column of vertical transfer units.” In sum, the claim language should remain consistent in addressing common elements through the claims. Columns should be recited where columns are necessary. Devices and units should not be used interchangeably.

Finally, the recent amendments to Claims 1 and 6 appear to incorporate combinations of elements from the dependent claims. Hence, in effect, Claims 1 and 6 are even further directed to the elements of the elected species. As a result, each of the dependent claims should be reviewed to guarantee they are each further limiting than each of their respective independent claims and that the elements introduced therein are consistent with the embodiment recited in Claims 1 and 6.

To remedy these issues, the Examiner requests substitute claims that are written in proper idiomatic English, that are grammatically correct and that conform to general Office clarity standards. In submitting substitute claims, Applicant should be careful not to introduce new matter or change the scope of the claims in anyway.

Closed Prosecution / Condition for Allowance

4. The Examiner submits this application is in condition for allowance except for the matters discussed above. Furthermore, prosecution on the merits is closed in accordance with

the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935). A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Cited Prior Art

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reasons:

- **Konishi (US 7,053,948 B2) & Suzuki (US 4,884,142)** each disclose an image pickup device that includes a drain circuit connected at the end of each column of a vertical transfer device near a horizontal transfer device; however, neither recites the particular of the drain circuits, as now claimed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Justin P. Misleh/
Primary Examiner
Group Art Unit 2622
June 8, 2009**